



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY TIDEWATER REGIONAL OFFICE

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Secretary of Natural Resources

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Regional Director

Permit No: VA0004049
Effective Date:
Expiration Date:

AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM AND

THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this cover page, and Parts I and II of this permit, as set forth herein.

Owner: Tyson Farms, Incorporated
Facility Name: Tyson Farms, Incorporated
City: Temperanceville
County: Accomack
Facility Location: 11224 Lankford Highway, Temperanceville, VA 23442

The owner is authorized to discharge to the following receiving stream:

Stream: Unnamed Tributary to Sandy Bottom Branch to Pocomoke Sound
River Basin: Chesapeake Bay/Atlantic Ocean & Small Coastal Basins
River Subbasin: N/A
Section: 2a
Class: III
Special Standards: None

Francis L. Daniel

Date

Part I

A. LIMITATIONS AND MONITORING REQUIREMENTS

- During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall(s): 001 (processing/rendering plant wastewater and storm water runoff).

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS				DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS [a]	
Flow (MGD)	Monthly Average		Weekly Average	Minimum		Maximum	Frequency	Sample Type
	NL	NA		NA	NL			
pH (S.U.)							Continuous	Totalizing, Indicating and Recording
BOD ₅ (mg/l;lb/d)								Grab
Total Suspended Solids (mg/l;lb/d)	16	NA	115	NA	6.0	26	1/Day	24-Hr Comp
Oil & Grease (mg/l;lb/d)	20	NA	143	NA	NA	30	2/Week	24-Hr Comp
Ammonia-Nitrogen (NH ₃ -N) (Nov-Apr) (mg/l) [a]	8	NA	57	NA	NA	14	1/Week	Grab
Ammonia-Nitrogen (NH ₃ -N) (May-Oct) (mg/l) [b]	1.7	NA		NA	2.7		1/Week	24-Hr Comp
Dissolved Oxygen (mg/l)	0.7	NA		NA	1.3		1/Week	24-Hr Comp
Total Residual Chlorine (TRC) (mg/l) [c] [d]	NA	NA		NA	NA		1/Week	Grab
Whole Effluent Toxicity (WET) (TU _c) [e]	0.0080	NA		NA	0.016		1/Day	Grab
Total Phosphorus (mg/l) [j]	NA	NA		NA	1.724		1/3 Months	24-Hr. Comp.
Total Phosphorus (mg/l/month) [f] [g]	2.0	NA		NA	NA		1/Week	24-Hr. Comp.
Total Phosphorus Year-to-Date (mg/l) [f] [g]	NL	NA		NA	NA		1/Month	24-Hr. Comp.
Total Phosphorus Calendar Year (mg/l) [g] [h]	NA	NA		NA	NL		1/Month	Calculated
Total Nitrogen (mg/l) [j]	0.3	NA		NA	NA		1/Year	Calculated
Total Nitrogen (mg/l/month) [f] [g] [i]	103	NA		NA	147		1/Week	24-Hr. Comp.
Total Nitrogen Year-To-Date (mg/l) [f] [g]	NL	NA		NA	NA		1/Month	24-Hr. Comp.
Total Nitrogen Calendar Year (mg/l) [g] [h]	NA	NA		NA	NL		1/Month	Calculated
Total Kjeldahl Nitrogen (mg/l) [f]	6.0	NA		NA	NA		1/Year	Calculated
Nitrites + Nitrates (mg/l) [f]	NL	NA		NA	NL		1/Month	24-Hr. Comp.
Total Recoverable Copper (ug/l)	NL	NA		NA	NL		1/Month	24-Hr. Comp.
Fecal Coliform (N/CML) [c] [k]	16	NA		NA	22		1/Week	24-Hr. Comp.
	126	NA		NA	NA		1/Week	Grab

Part I

NA = Not Applicable.

NL = No limitation, however, reporting is required.

1/3 Months = In accordance with the following schedule: 1st quarter (January 1 - March 31); 2nd quarter (April 1 - June 30); 3rd quarter (July 1 - September 30); 4th quarter (October 1 - December 31).
1/Year = Between January 1 and December 31.

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

In addition to any Total Nitrogen or Total Phosphorus concentration limits listed above, this facility has Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under registration number VAN050005, enforceable under General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia.

[a] Ammonia limitations are effective for the winter months of November 1 through April 30.

[b] Ammonia limitations are effective for the summer months of May 1 through October 31.

[c] See Part I.B. For Alternative Disinfection Special Condition Language.

[d] Total Residual Chlorine shall be monitored and reported, as required, at any time chlorine is used for disinfection (ie. when the ultraviolet radiation(UV) disinfection system is non-operational, undergoing maintenance or otherwise malfunctioning).

[e] See Part I.C. for WET limitations and monitoring requirements.

[f] See Parts I.D.6. and I.D.7. for quantification levels and reporting requirements.

[g] See Part I.D.4. for Nutrient Reporting Calculations

[h] Annual average limitation, based on a calculation of all samples collected during the calendar year.

[i] Total Nitrogen, which is the sum of Total Kjeldahl Nitrogen and Nitrates plus Nitrites, shall be derived from the results of those tests.

[j] Interim limits expire on December 31, 2010.

[k] Fecal coliform is calculated as a geometric mean.

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.

Part I

A. LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall(s): 003, 004 (storm water runoff from parking lots, roof drains and grass areas not associated with regulated industrial activity).

Such discharges shall be limited and monitored by the permittee as specified below:

THESE OUTFALLS SHALL CONTAIN ONLY STORM WATER RUNOFF NOT ASSOCIATED WITH A REGULATED INDUSTRIAL ACTIVITY WHERE NO CHEMICAL MONITORING IS REQUIRED. THERE SHALL BE NO DISCHARGE OF PROCESS WASTEWATER FROM THESE OUTFALLS.

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.

B. ADDITIONAL TOTAL RESIDUAL CHLORINE (TRC) LIMITATIONS AND MONITORING REQUIREMENTS

1. a. The permittee shall monitor the TRC at the outlet of each operating chlorine contact tank, prior to dechlorination, once per day by grab sample.
 - b. No more than three (3) of all samples taken after the chlorine contact tank, prior to dechlorination, shall be less than 1.5 mg/l for any one calendar month.
 - c. No TRC sample collected after the chlorine contact tank, prior to dechlorination, shall be less than 0.6 mg/l.
2. If an alternative to chlorination as a disinfection method is chosen, *E. coli* shall be limited and monitored by the permittee as specified below:

<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Average</u>	<u>Frequency</u>	<u>Sample Type</u>
<i>E. coli</i>	126* (n/100 ml)	2/Month	Grab

* - Geometric Mean

The above requirements, if applicable, shall substitute for the TRC requirements delineated in Parts I.A. and I.B.1 above.

C. WHOLE EFFLUENT TOXICITY (WET) LIMITATION MONITORING REQUIREMENTS
FOR OUTFALL 001

1. The Whole Effluent Toxicity (WET) Limitation in Part I.A. page 1 for outfall 001 is a final limit. The limit is:

Chronic 1.724 TU_c (NOEC ≥58.0% effluent)

2. Commencing with the effective date of the limit, the permittee shall conduct quarterly chronic toxicity tests using a 24 hour flow-proportioned composite of final effluent from outfall 001. Toxicity samples shall be taken at the same time as the other sampling parameters required in Part I.A. of this permit. The chronic test to use is:

**Chronic 3-Brood Static Renewal Survival and Reproduction
Test using *Ceriodaphnia dubia* (C.d)**

- a. The chronic test shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction. The test endpoint (limit) must be represented by a dilution, and if other than 100%, should be bracketed by at least one dilution above and one dilution below it. Express the test NOEC as TU_c (Chronic Toxic Units), by dividing 100/NOEC for DMR reporting. The IC₂₅ should be included on the submitted test reports.
 - b. One complete copy of the toxicity test report shall be submitted with the DMR. A complete report must contain a copy of all laboratory benchsheets, certificates of analysis, and all chains of custody.
 - c. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.
3. The permit may be modified or, alternatively, revoked and reissued to include pollutant specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant specific limits must control the toxicity of the effluent.

D. OTHER REQUIREMENTS OR SPECIAL CONDITIONS

1. Permit Reopeners

a. Water Quality Standards Reopener

Should effluent monitoring indicate the need for any water quality based limitation, this permit may be modified or, alternatively, revoked and reissued to incorporate appropriate limitations.

b. Nutrient Enriched Waters Reopener for Dischargers to the Chesapeake Bay Watershed

This permit may be modified or, alternatively, revoked and reissued to incorporate new or alternative nutrient limitations and/or monitoring requirements should the State Water Control Board adopt new nutrient standards for the waterbody receiving the discharge, including the Chesapeake Bay or its tributaries, or if a future water quality regulation or statute requires new or alternative nutrient control.

c. Total Maximum Daily Load (TMDL) Reopener

This permit shall be modified or, alternatively, revoked and reissued if any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits or conditions on the facility that are not consistent with the permit requirements.

2. Licensed Operator Requirement

The permittee shall employ or contract at least one Class II licensed wastewater works operator for this facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the State Water Control Board for Waterworks and Wastewater Works Operators. The permittee shall notify the Tidewater Regional Office in writing whenever he is not complying, or has grounds for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.

3. Operations and Maintenance (O & M) Manual

The permittee shall review the existing O & M Manual and notify the DEQ Tidewater Regional Office, in writing, that it is still current. This O&M Manual shall include descriptions of the treatment works operations and its contributing sources, and practices necessary to achieve compliance with this permit. The revised Manual shall specifically address: treatment system operation; routine and emergency maintenance; wastewater and/or storm water collection, treatment and disposal/discharge; permitted outfall locations; effluent sampling and preservation procedures; laboratory testing, analysis and recording of results; submittal and retention of all records, reporting forms and testing results; and a listing of the personnel responsible for the above activities. Also included in the Manual shall be a list of facility, local and state emergency contacts; procedures for reporting and responding to any spills/overflows/ treatment works upsets; a copy of the VPDES permit; and copies of all reporting forms. If the O&M Manual is no longer current, a revised O&M Manual shall be submitted for approval. Once approved, this revised manual shall become an enforceable condition of this permit. Future changes to the facility must be addressed by the submittal of a revised O & M Manual. Non-compliance with the O & M Manual shall be deemed a violation of the permit.

Letter/Revised Manual Due: No later than February 1, 2011.

4. Nutrient Reporting Calculations

For each calendar month, the DMR shall show the calendar year-to-date average concentration (mg/L) calculated in accordance with the following formulae:

$AC_{avg-YTD} = (\text{sum}(\text{Jan-current month } MC_{avg}) \div (\# \text{ of months})$ where:

$AC_{avg-YTD}$ = calendar year-to-date average concentration (mg/L) (parameter codes 805 and 806)

MC_{avg} = monthly average concentration (mg/L) as reported on DMR

The total nitrogen and phosphorus average concentrations (mg/L) for each calendar year (AC) shall be shown on the December DMR due January 10th of the following year. These values shall be calculated in accordance with the following formulae:

AC_{avg} = (sum_(Jan-Dec) MC_{avg}) ÷ 12 where:

AC_{avg} = calendar year average concentration (mg/L)
(parameter codes 792 and 794)

MC_{avg} = monthly average concentration (mg/L) as reported
on DMR

For Total Phosphorus, all daily concentration data below the quantification level (QL) for the analytical method used should be treated as half the QL. All daily concentration data equal to or above the QL for the analytical method used shall be treated as it is reported.

For Total Nitrogen (TN), if none of the daily concentration data for the respective species (i.e., TKN, Nitrates/Nitrites) are equal to or above the QL for the respective analytical methods used, the daily TN concentration value reported shall equal one half of the largest QL used for the respective species. If one of the data is equal to or above the QL, the daily TN concentration value shall be treated as that data point is reported. If more than one of the data is above the QL, the daily TN concentration value shall equal the sum of the data points as reported.

5. Notification Levels

The permittee shall notify the Department as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
 - (1) One hundred micrograms per liter (100 ug/l);
 - (2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
 - (4) The level established by the State Water Control Board.

- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

- (1) Five hundred micrograms per liter (500 ug/l);
- (2) One milligram per liter (1 mg/l) for antimony;
- (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application.
- (4) The level established by the State Water Control Board.

6. Quantification Levels Under Part I.A.

- a. The maximum quantification levels (QL) shall be as follows:

<u>Effluent Characteristic</u>	<u>Quantification Level</u>
Total Kjeldahl Nitrogen	0.5 mg/l
Total Phosphorus	0.1 mg/l
Total Nitrogen	1.0 mg/l
Nitrites + Nitrates	0.5 mg/l

- b. The permittee may use any approved method which has a QL equal to or lower than the (QL) listed in 5.4 above. The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method.

7. Compliance Reporting Under Part I.A.

- a. Monthly Average -- Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in Part I.A shall be determined as follows: All data below the quantification level (QL) listed in Part I.D.6. above shall be treated as zero. All data equal to or above the QL listed in Part I.D.6. above shall be treated as it is reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, for the month. This arithmetic average shall be reported on the DMR as calculated. If all data are below the QL, then the average shall be reported as <QL.

- b. Daily Maximum -- Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in Part I.A. shall be determined as follows: All data below the quantification level (QL) listed in Part I.D.6. above shall be treated as zero. All data equal to or above the QL shall be treated as reported. An arithmetic average of the values shall be calculated using all reported data, including the defined zeros, collected for each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are below the QL, then the average shall be reported as <QL.
- c. Any single datum required shall be reported as "<QL" if it is less than the QL listed in Part I.D.6. above. Otherwise, the numerical value shall be reported.
- d. Where possible, all limit values on the Part I.A. limits page(s) are expressed in two significant figures. As a result, single, trailing zeros occurring after any single digit are significant. Effluent limits of 10 or greater are rounded to two significant whole numbers, with the exception that loading limits are expressed as whole numbers.
- e. The permittee shall report at least the same number of significant figures as the permit limit for a given parameter. Regardless of the rounding convention used (i.e., 5 always rounding up or to the nearest even number) by the permittee, the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

8. Materials Handling and Storage

Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of and/or stored in such a manner so as not to permit a discharge of such product, materials, industrial wastes and/or other wastes to State waters, except as expressly authorized.

9. Minimum Freeboard

The permittee shall ensure that all basins or lagoons maintain a minimum freeboard of two (2) feet at all times. Should the two-feet freeboard not be maintained, the permittee shall immediately notify the DEQ Tidewater Regional Office, describing the problem and corrective measures taken to correct the problem. Within 5 days of the notification, the permittee shall submit a written statement of explanation and corrective measures taken.

10. Stormwater Discharge Exception

All pollutant management activities (basins or lagoons) covered under this permit shall maintain no point source discharge of pollutants to surface waters except in the case of a storm event greater than the 25-year, 24-hour storm. The operation of the facilities of the owner permitted herein shall not contravene the Water Quality Standards, as adopted and amended by the Board, or any provision of the Water Control Law.

11. Solids Handling and Disposal Plan

Within 60 days of the effective date of this permit, the permittee shall submit for approval to the DEQ Tidewater Regional Office a solids handling and disposal plan or notify in writing of an existing, current plan. Upon approval of a new plan or acceptance of an existing plan, this plan shall become an enforceable part of this permit.

The permittee shall submit an annual report of their solids handling and disposal activities to the DEQ Tidewater Regional Office. **The first report shall be due on February 10, 2011 and the 10th of February each year after.**

E. STORM WATER MANAGEMENT CONDITIONS

1. General Storm Water Conditions

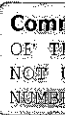
a. Sample Type

For all storm water monitoring required in Part I.A. or other applicable sections of this permit, a minimum of one grab sample shall be taken. Unless otherwise specified, all such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The required 72-hour storm event interval is waived where the preceding measurable storm event did not result in a measurable discharge from the facility. The required 72-hour storm event interval may also be waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the permittee shall document with the SWP3 a description of why a grab sample during the first 30 minutes was impracticable. If storm water discharges associated with industrial activity commingle with process or nonprocess water, then where practicable permittees must attempt to sample the storm water discharge before it mixes with the nonstorm water discharge.

b. Recording of Results

For each storm event monitored under Part I.A. of this permit, the permittee shall record and retain on site with the SWP3 the following information:

- (1) The date and duration (in hours) of the storm event(s) sampled;
- (2) The rainfall measurements or estimates (in inches) of the storm event which generated the sampled discharge; and



- (3) The duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.

In addition, the permittee shall maintain a monthly log documenting the amount of rainfall received at this facility on a daily basis. This information shall be retained on site with the SWP3.

c. Sampling Waiver

When a permittee is unable to collect storm water samples required in Part I.A. or other applicable sections of this permit within a specified sampling period due to adverse climatic conditions, the permittee shall collect a substitute sample from a separate qualifying event in the next period and submit these data along with the data for the routine sample in that period. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

d. Representative Discharge

When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes substantially identical effluents are discharged, and the DEQ Tidewater Regional Office has approved them as such, the permittee may test the effluent of one of such outfalls and report that the quantitative data also apply to the substantially identical outfall(s) provided that the permittee includes in the SWP3 a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [(i.e., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent))] shall be provided in the plan.

e. Quarterly Visual Examination of Storm Water Quality

Unless another more frequent schedule is established elsewhere within this permit, the permittee shall perform and document a visual examination of a storm water discharge associated with industrial activity from each outfall. The examination(s) must be made at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December.

- (1) Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examination shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The examination must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previous measurable (greater than 0.1 inch rainfall) storm event. The required 72-hour storm event interval is waived where the preceding measurable storm event did not result in a measurable discharge from the facility. The required 72-hour storm event interval may also be waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. Where practicable, the same individual should carry out the collection and examination of discharges for the entire permit term.
- (2) Visual examination reports must be maintained onsite with the SWP3. The report shall include the outfall location, the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating

solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

- (3) When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the examination data also applies to the substantially identical outfall(s) provided that the permittee includes in the SWP3 a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area (i.e., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)) shall be provided in the plan.

- (4) When the permittee is unable to conduct the visual examination due to adverse climatic conditions, the permittee must document the reason for not performing the visual examination and retain this documentation onsite with the records of the visual examinations. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

f. Releases of Hazardous Substances or Oil in Excess of Reportable Quantities

The discharge of hazardous substances or oil in the storm water discharge(s) from a facility shall be prevented or minimized in accordance with the applicable SWP3 for the facility. This permit does not authorize the discharge of hazardous substances or

oil resulting from an onsite spill. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR 110 (1998), 40 CFR 117 (1998) or 40 CFR 302 (1998) occurs during a 24-hour period, the permittee is required to notify the Department in accordance with the requirements of Part II.G. of this permit as soon as he or she has knowledge of the discharge. In addition, the storm water pollution prevention plan required by this permit must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate. This permit does not relieve the permittee of the reporting requirements of 40 CFR 110 (1998), 40 CFR 117 (1998) and 40 CFR 302 (1998) or . 62.1-44.34:19 of the Code of Virginia.

g. Allowable Non-Storm Water Discharges

(1). The following non-storm water discharges are authorized by this permit provided the non-storm water component of the discharge is in compliance with Part g.(2), below.

- (a) Discharges from fire fighting activities;
- (b) Fire hydrant flushings;
- (c) Potable water including water line flushings;
- (d) Uncontaminated air conditioning or compressor condensate;
- (e) Irrigation drainage;
- (f) Landscape watering provided all pesticides, herbicides, and fertilizers have been applied in accordance with manufacturer's instructions;
- (g) Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
- (h) Routine external building wash down which does not use detergents;
- (i) Uncontaminated ground water or spring water;

- (j) Foundation or footing drains where flows are not contaminated with process materials such as solvents;
 - (k) Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but NOT intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).
- (2). For all regularly-occurring discharges listed in g.(1) above that occur in industrial areas, the Storm Water Pollution Prevention Plan must include:
- (a) Identification of each allowable non-storm water source;
 - (b) The location where the non-storm water is likely to be discharged; and
 - (c) Descriptions of any BMPs that are being used for each source.
- (3). If mist blown from cooling towers is included as one of the allowable non-storm water discharges from the facility, the permittee must specifically evaluate the potential for the discharges to be contaminated by chemicals used in the cooling tower, and must select and implement BMPs to control such discharges so that the levels of cooling tower chemicals in the discharges would not cause or contribute to a violation of an applicable water quality standard.

2. ~~Storm~~ Water Pollution Prevention Plan (SWP3)

A storm water pollution prevention plan (SWP3) shall be developed for the facility. The SWP3 shall be prepared in accordance with good engineering practices. The SWP3 shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the SWP3 shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. The permittee must implement the provisions of the SWP3 as a condition of this permit.

The SWP3 requirements of this permit may be fulfilled by incorporating by reference other plans or documents such as an erosion and sediment control plan, a spill prevention control and countermeasure (SPCC) plan developed for the facility under Section 311 of the Clean Water Act or best management practices (BMP) programs otherwise required for the facility provided that the incorporated plan meets or exceeds the SWP3 requirements of this section. If an erosion and sediment control plan is being incorporated by reference, it shall have been approved by the locality in which the activity is to occur or by another appropriate plan approving authority authorized under the Virginia Erosion and Sediment Control Regulation 4 VAC 50-30-10 et seq. All plans incorporated by reference into the SWP3 become enforceable under this permit.

a. Deadlines for SWP3 Preparation and Compliance

Existing Facilities

The SWP3 which was previously prepared and implemented shall be complied with, and continually updated as needed in accordance with sections b., c., d. and e. below.

(1) Measures That Require Construction

In cases where construction is necessary to implement measures required by the SWP3, the SWP3 shall contain a schedule that provides compliance with the plan as expeditiously as practicable, but no later than 3 years after the effective date of the permit. Where a construction compliance schedule is included in the SWP3, the schedule shall include appropriate nonstructural and/or temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure.

b. Signature and SWP3 Review

(1) Signature/Location

The SWP3 shall be signed in accordance with Part II.K. of this permit and be retained onsite at the facility which generates the storm water discharge in accordance with Part II.B. of this

permit. For inactive facilities, the SWP3 may be kept at the nearest office of the permittee.

(2) Availability

The permittee shall make the SWP3, annual site compliance inspection report, or other information available to the DEQ upon request.

(3) Required Modifications

The Tidewater Regional Office may notify the permittee at any time that the SWP3 does not meet one or more of the minimum requirements of the permit. Such notification shall identify those provisions of the permit which are not being met by the SWP3, and identify which provisions of the plan require modifications in order to meet the minimum requirements of this permit. Within 60 days of such notification, the permittee shall make the required changes to the SWP3 and shall submit to the DEQ Tidewater Regional Office a written certification that the requested changes have been made.

c. Keeping SWP3s Current

The permittee shall amend the SWP3 whenever there is a change in design, construction, operation, or maintenance which has a significant effect on the potential for the discharge of pollutants to surface waters of the State or if the SWP3 proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under section d. below, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. New owners shall review the existing SWP3 and make appropriate changes. Amendments to the plan may be reviewed by the Department in the same manner as noted in section b. above.

d. Contents of SWP3

The contents of the SWP3 shall comply with the requirements listed below and those in Part I. ^{5.0} (Facility-specific Storm Water Conditions) of this permit; these requirements are cumulative. The SWP3 shall include, at a minimum, the following items.

(1) Pollution Prevention Team

The SWP3 shall identify a specific individual or individuals within the facility organization as members of a storm water pollution prevention team that are responsible for developing the SWP3 and assisting the facility or plant manager in its implementation, maintenance, and revision. The SWP3 shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's SWP3.

(2) Description of Potential Pollutant Sources

The SWP3 shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or that may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. The SWP3 shall identify all activities and significant materials which may potentially be significant pollutant sources. The SWP3 shall include, at a minimum:

(a) Drainage

- i. A site map indicating an outline of the portions of the drainage area of each storm water outfall within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under section (2)(c) below have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations; vehicle and equipment maintenance and/or cleaning areas; loading/unloading areas; locations used for the treatment, storage or disposal of wastes and wastewaters; locations used for the treatment, filtration or storage of water

supplies; liquid storage tanks; processing areas; and, storage areas. The map must indicate the outfall locations and the types of discharges contained in the drainage areas of these outfalls.

- ii. For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in the storm water discharges. Factors to consider include: the toxicity of chemicals; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and, history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.

(b) Inventory of Exposed Materials

An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of three years prior to the effective date of this permit and the present; method and location of on-site storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of three years prior to the effective date of this permit and the present; the location and a description of existing structural and non-structural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(c) Spills and Leaks

A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of three years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(d) Sampling Data

A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(e) Risk Identification and Summary of Potential Pollutant Sources

A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and, on-site waste disposal practices and wastewater treatment activities to include sludge drying, storage, application or disposal activities. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, total suspended solids, etc.) of concern shall be identified.

(3) Measures and Controls

The permittee shall develop a description of storm water management controls appropriate for the facility and implement these controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources

of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls.

(a) Good Housekeeping

Good housekeeping requires the clean and orderly maintenance of areas which may contribute pollutants to storm water discharges. The SWP3 shall describe procedures performed to minimize contact of materials with storm water runoff. Particular attention should be paid to areas where raw materials are stockpiled, material handling areas, storage areas, liquid storage tanks, material handling areas, and loading/unloading areas.

(b) Preventive Maintenance

A preventive maintenance program shall involve: timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins); inspection and testing of facility equipment and systems to uncover conditions that could cause breakdowns or failures which could result in discharges of pollutants to surface waters; and, appropriate maintenance of such equipment and systems.

(c) Spill Prevention and Response Procedures

Areas where potential spills may occur which can contribute pollutants to storm water discharges, and their accompanying drainage points shall be identified clearly in the SWP3. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the SWP3 and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to the appropriate personnel.

(d) Inspections

In addition to or as part of the comprehensive site compliance evaluation required under section d.(4) below, qualified facility personnel who are familiar with the industrial activity, the Best Management Practices (BMPs) and the SWP3 shall be identified to inspect designated equipment and areas of the facility at appropriate intervals. The inspection frequency shall be specified in the plan based upon a consideration of the level of industrial activity at the facility, but shall be a minimum of quarterly unless more frequent intervals are specified elsewhere in the permit. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained with the pollution prevention plan.

(e) Employee Training

Employee training programs shall inform personnel responsible for implementing activities identified in the SWP3 or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The SWP3 shall identify periodic dates for such training.

(f) Recordkeeping and Internal Reporting Procedures

A description of incidents such as spills, or other discharges, along with other information describing the quality and quantity of storm water discharges shall be included in the SWP3. Inspections and maintenance activities shall be documented

and records of such activities shall be incorporated into the plan.

(g) Sediment and Erosion Control

The SWP3 shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(h) Management of Runoff

The SWP3 shall contain a narrative consideration of the appropriateness of traditional storm water management practices [practices other than those which control the generation or source(s) of pollutants] used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The SWP3 shall provide for the implementation and maintenance of measures that the permittee determines to be reasonable and appropriate. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices; reuse of collected storm water (such as for a process or as an irrigation source); inlet controls (such as oil/water separators); snow management activities; infiltration devices; wet detention/retention devices; or, other equivalent measures.

(4) Comprehensive Site Compliance Evaluation

Qualified facility personnel who are familiar with the industrial activity, the BMPs and the SWP3 shall conduct site compliance evaluations at appropriate intervals specified in the SWP3, but, in no case less than once a year during the

permit term. Such evaluations shall include the following.

- (a) Areas contributing to a storm water discharge associated with industrial activity, such as material storage, handling and disposal activities, shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the SWP3 shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the SWP3, such as spill response equipment, shall be made.
- (b) Based on the results of the evaluation, the description of potential pollutant sources identified in the SWP3 in accordance with section d.(2) above and pollution prevention measures and controls identified in the SWP3 in accordance with section d.(3) above shall be revised as appropriate within 2 weeks of such evaluation and shall provide for implementation of any changes to the SWP3 in a timely manner, but in no case more than 12 weeks after the evaluation.
- (c) A report summarizing the scope of the evaluation, personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the SWP3, and actions taken in accordance with section (4)(b) above shall be made and retained as part of the SWP3 for at least three years from the date of the evaluation. The report shall identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report

shall contain a certification that the facility is in compliance with the SWP3 and this permit. The report shall be signed in accordance with Part II.K. of this permit.

- (d) Where compliance evaluation schedules overlap with inspections required under section d.(3)(d), the compliance evaluation may be conducted in place of one such inspection.

e. Special Pollution Prevention Plan Requirements

~~In~~ addition to the minimum standards listed in section d. above and those in Part I.L.5. (Facility-specific Storm Water Conditions) of this permit, the SWP3 shall include a complete discussion of measures taken to conform with the following applicable guidelines.

- (1) Additional Requirements for Storm Water Discharges Associated with Industrial Activity from Facilities Subject to Emergency Planning and Community Right-to Know Act (EPCRA) Section 313 Requirements

~~In~~ addition to the requirements of Part I.L.5. (Facility-specific Storm Water Conditions) of this permit, and other applicable conditions of this permit, SWP3s for facilities subject to reporting requirements under EPCRA Section 313 prior to May 1, 1997, for chemicals which are classified as Section 313 water priority chemicals in accordance with the definition at the end of this section, except as provided in section e.(1)(b)ii. below, and where there is the potential for these chemicals to mix with storm water discharges, shall describe and ensure the implementation of practices which are necessary to provide for conformance with the following guidelines.

- (a) In areas where Section 313 water priority chemicals are stored, processed or otherwise handled, appropriate containment, drainage control and/or diversionary structures shall be provided unless otherwise exempted under section e.(1)(c) below. At a minimum, one of the following

preventive systems or its equivalent shall be used:

- i. Curbing, culverting, gutters, sewers or other forms of drainage control to prevent or minimize the potential for storm water runoff to come into contact with significant sources of pollutants; or
 - ii. Roofs, covers or other forms of appropriate protection to prevent storage piles from exposure to storm water and wind.
- (b) In addition to the minimum standards listed under section e.(1) above and except as otherwise exempted under section e.(1)(c) below, the SWP3 shall include a complete discussion of measures taken to conform with other effective storm water pollution prevention procedures, and applicable state rules, regulations, and guidelines.
- i. Liquid Storage Areas Where Storm Water Comes Into Contact with Any Equipment, Tank, Container, or Other Vessel Used for Section 313 Water Priority Chemicals
 - No tank or container shall be used for the storage of a Section 313 water priority chemical unless its material and construction are compatible with the material stored and conditions of storage such as pressure, temperature, etc.
 - Liquid storage areas for Section 313 water priority chemicals shall be operated to minimize discharges of these chemicals. Appropriate measures to minimize discharges of Section 313 water priority chemicals may include secondary containment provided for at least the entire contents of the largest single tank plus

sufficient freeboard to allow for precipitation, a strong spill contingency and integrity testing plan, and/or other equivalent measures.

- ii. Material Storage Areas for Section 313 Water Priority Chemicals Other Than Liquids

Material storage areas for Section 313 water priority chemicals other than liquids which are subject to storm water runoff, leaching, or wind effects shall incorporate drainage or other control features which will minimize the discharge of Section 313 water priority chemicals by reducing storm water contact with those chemicals.

- iii. Truck and Rail Car Loading and Unloading Areas for Liquid Section 313 Water Priority Chemicals

Truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals shall be operated to minimize discharges of those chemicals. Protection such as overhangs or door skirts to enclose trailer ends at truck loading/unloading docks shall be provided as appropriate. Appropriate measures to minimize discharges of Section 313 chemicals may include: the placement and maintenance of drip pans (including the proper disposal of materials collected in the drip pans) where spillage may occur (such as hose connections, hose reels and filler nozzles) when making and breaking hose connections; a strong spill contingency and integrity testing plan; and/or other equivalent measures.

- iv. Areas Where Section 313 Water Priority Chemicals are Transferred, Processed or Otherwise Handled

Processing equipment and materials handling equipment shall be operated so as to minimize discharges of Section 313 water priority chemicals. Materials used in piping and equipment shall be compatible with the substances handled. Drainage from process and materials handling areas shall minimize storm water contact with Section 313 water priority chemicals. Additional protection such as covers or guards to prevent exposure to wind effects, spraying or releases from pressure relief vents from causing a discharge of Section 313 water priority chemicals to the drainage system shall be provided as appropriate. Visual inspections or leak tests shall be provided for overhead piping conveying Section 313 water priority chemicals without secondary containment.

- v. Discharges from Areas Covered by Paragraphs i., ii., iii. or iv.

- Drainage from areas covered by paragraphs i., ii., iii. or iv. of this section should be restrained by valves or other positive means to prevent the discharge of a spill or other excessive leakage of Section 313 water priority chemicals. Where containment units are employed, such units may be emptied by pumps or ejectors; however, these shall be manually activated.
- Flapper-type drain valves shall not be used to drain containment areas. Valves used for the drainage of containment areas should, as far as is practical,

be of manual, open-and-closed design.

- If facility drainage is not engineered as above, the final discharge of all in-facility storm sewers shall be equipped to be equivalent with a diversion system that could, in the event of an uncontrolled spill of Section 313 water priority chemicals, return the spilled material to the facility.
 - Records shall be kept of the frequency and estimated volume (in gallons) of discharges from containment areas.
- vi. Facility Site Runoff Other Than From Areas Covered by i., ii., iii. or iv.

Other areas of the facility [those not addressed in paragraphs i., ii., iii. or iv.], from which runoff which may contain Section 313 water priority chemicals or where spills of Section 313 water priority chemicals could cause a discharge, shall incorporate the necessary drainage or other control features to prevent discharge of spilled or improperly disposed material and ensure the mitigation of pollutants in storm water runoff or leachate.

- vii. Preventive Maintenance and Housekeeping

All areas of the facility shall be inspected at specific intervals identified in the SWP3 for leaks or conditions that could lead to discharges of Section 313 water priority chemicals or for direct contact of storm water with raw materials, intermediate materials,

waste materials or products. In particular, facility piping, pumps, storage tanks and bins, pressure vessels, process and material handling equipment, and material bulk storage areas shall be examined for any conditions or failures which could cause a discharge. Inspection shall include examination for leaks, corrosion, support or foundation failure, effects of wind blowing, or other forms of deterioration or noncontainment. Inspection intervals shall be specified in the plan and shall be based on design and operational experience. Different areas may require different inspection intervals. Where a leak or other condition is discovered which may result in significant releases of Section 313 water priority chemicals to waters of the State, action to stop the leak or otherwise prevent the significant release of Section 313 water priority chemicals to waters of the State shall be immediately taken or the unit or process shut down until such action can be taken. When a leak or noncontainment of a Section 313 water priority chemical has occurred, contaminated soil, debris, or other material must be promptly removed and disposed in accordance with Federal, State, and local requirements and as described in the plan.

viii. Facility Security

Facilities shall have the necessary security systems to prevent accidental or intentional entry which could cause a discharge. Security systems described in the plan shall address fencing, lighting, vehicular traffic control, and securing of equipment and buildings.

ix. Training

Facility employees and contractor personnel that work in areas where Section 313 water priority chemicals are used or stored shall be trained in and informed of preventive measures at the facility. Employee training shall be conducted at intervals specified in the plan, but not less than once per year. Training shall address pollution control laws and regulations, the SWP3 and the particular features of the facility and its operation which are designed to minimize discharges of Section 313 water priority chemicals. The SWP3 shall designate a person who is accountable for spill prevention at the facility and who will set up the necessary spill emergency procedures and reporting requirements so that spills and emergency releases of Section 313 water priority chemicals can be isolated and contained before a discharge of those chemicals can occur. Contractor or temporary personnel shall be informed of facility operation and design features in order to prevent discharges or spills from occurring.

- (c) Facilities subject to reporting requirements under EPCRA Section 313 for chemicals that are classified as Section 313 water priority chemicals, in accordance with the definition at the end of this section, that are handled and stored onsite only in gaseous or nonsoluble liquid or solid (at atmospheric pressure and temperature) forms may provide a certification as such in the SWP3 in lieu of the additional requirements in section e.(1) above. Such certification shall include a narrative description of all water priority chemicals and the form in which they are handled and stored, and shall be signed in accordance with Part II.K. of this permit.

(d) The SWP3 shall be certified in accordance with Part II.K. of this permit.

(2) Requirements for Salt Storage

Storage piles of salt used for deicing or other commercial or industrial purposes and which generate a storm water discharge associated with industrial activity which is discharged to surface waters of the State shall be enclosed or covered to prevent exposure to precipitation, except for exposure resulting from adding or removing materials from the pile. Permittees shall demonstrate compliance with this provision as expeditiously as practicable, but in no event later than 3 years from the effective date of this permit. Annual reports of progress towards compliance shall be compiled and added to the Pollution Prevention Plan. Piles do not need to be enclosed or covered where storm water from the pile is not discharged to surface waters of the State.

(2) Requirements for Salt Storage

Storage piles of salt used for deicing or other commercial or industrial purposes and which generate a storm water discharge associated with industrial activity which is discharged to surface waters of the State shall be enclosed or covered to prevent exposure to precipitation, except for exposure resulting from adding or removing materials from the pile. Piles do not need to be enclosed or covered where storm water from the pile is not discharged to surface waters of the State.

"Section 313 Water Priority Chemicals" means a chemical or chemical categories which: 1) are listed at 40 CFR Part 372.65 (1998) pursuant to Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986) (42 USC 11001 et seq.); 2) are present at or above threshold levels at a facility subject to EPCRA Section 313 reporting requirements; and 3) that meet at least one of the following criteria: (i) are listed in Appendix D of 40 CFR Part 122 (1998) on either Table II (organic priority pollutants), Table III (certain metals, cyanides and phenols) or Table V (certain toxic

pollutants and hazardous substances); (ii) are listed as a hazardous substance pursuant to section 311(b)(2)(A) of the Clean Water Act at 40 CFR Part 116.4 (1998); or (iii) are pollutants for which EPA has published acute or chronic water quality criteria.